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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/897,163 | 06/28/2001 | Stephen C. Davis | A179 1010.1 | 1461 |
| 7590 10/23/2003 Womble Carlyle Sandridge & Rice, PLLC P.O. Box 7037 Atlanta, GA 30357-0037 | | | EXAMINER VO. HAI | |
| | | | ART UNIT 1771 | PAPER NUMBER |

DATE MAILED: 10/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/897,163 | DAVIS ET AL. | |
| | Examiner | Art Unit | |
| | Hai Vo | 1771 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/14/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-44 is/are pending in the application.
- 4a) Of the above claim(s) 15-30 and 40-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-14, 29 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

Claim objections

1. Claim 12 and 34 are objected to under 37 CFR 1.75 as being a substantial duplicate of claim 31. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 31, 34-36, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Natesh (US 5,739,194) in view of Sato et al (US 5,360,835). Natesh teaches a water-based coating composition comprising a urethane prepolymer, a urethane acrylate (trimethylol propane triacrylate) monomer (column 5, lines 45-47), a hydrogen peroxide catalyst, and a ferric ion graft initiator (example 1). Natesh does not specifically disclose the coating composition comprising a latex. Sato, however, teaches a polyurethane/ acrylic coating composition comprising synthetic rubber latexes of SBR or NBR (column 11, line 10). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the rubber latex in the coating

motivated by the desire to facilitate the mixing and processing of the materials and further to provide the coating with higher tear strength.

4. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Natesh (US 5,739,194) in view of Sato et al (US 5,360,835) as applied to claim 1 above, as evidenced by Huybrechts (US 5,936,026). Natesh does not specifically disclose the coating composition comprising a UV inhibitor. Huybrechts is relied on as evidence that teaches a coating composition for an automotive finish comprising a UV inhibitor (column 11, lines 35-40). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ a UV inhibitor in the coating composition motivated by the desire to provide the coating with UV resistance.
5. Claims 1-14, and 31-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sanduja et al (US 6,414,048) in view of Sato et al (US 5,360,835), as evidenced by Kreiser et al (US 6,245,267). Sanduja teaches each and every limitation set forth in the claims except a latex and a low density polymeric foam substrate (abstract, example 1). Sato, however, teaches a polyurethane/ acrylic coating composition comprising synthetic rubber latexes of SBR or NBR (column 11, line 10). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the rubber latex in the coating motivated by the desire to facilitate the mixing and processing of the materials and further to provide the coating with higher tear strength.

Sanduja teaches the coating having been applied to a polyolefin tubing. Sanduja does not specifically disclose that a polyolefin tube is made of a polyolefin foam. Kreiser is relied on as evidence that teaches the polyolefin tube made of a polyolefin foam (column 6, lines 1-3). Kreiser discloses the polyethylene foam having a density of 0.024 g/cm³ (example 2). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the polyolefin foam as a polyolefin tube because such is the intended use of the material and Keiser provides necessary detail to practice the invention of Sanduja.

With regard to claims 6-13, and 35-39, Sanduja reads on the limitations (example 1).

With regard to claim 14, Sanduja is silent as to the thickness of the coating. However, it would be obvious to one of ordinary skill in the art to employ as little of the coating as possible in order to reduce cost without losing efficiency. See ***In re Aller***, 105 USPQ 233 which holds that discovering the optimum or workable ranges is involved only routine skill in the art.

6. Claims 1-3, 6, 8, 9, 12, 14, 31-34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bluem et al (US 6,214,460) in view of Lamon et al (US 6,565,969). Bluem teaches a water-based adhesive composition comprising a polyepoxide resin, a alkyl acrylate monomer, a peroxide catalyst, and a silver particle (abstract, column 9, lines 10-15, and column 10, lines 10-12). Bluem teaches the adhesive composition being bonded to the polyethylene foam

surface (column 11, lines 5-11). It appears that Bluem is using the same material to form a backing layer, i.e., polyethylene foam as Applicants. It is the examiner's position that the foam of Bluem would inherently have a density within the claimed range. This is in line with *In re Spada*, 15 USPQ 2d 1655 (1990) which holds that products of identical chemical composition can not have mutually exclusive properties. Bluem teaches the adhesive coating having a thickness of 1mil or 25.4 microns within the claimed range (column 20, line 3). Bluem does not specifically disclose the adhesive composition comprising a latex. Lamon, however, teaches an adhesive article comprising a bondable layer that includes a polyepoxide resin, a monomer, a polyepoxide curing agent and a latex of synthetic rubber (column abstract, column 16, lines 55-60). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the rubber latex in the adhesive coating motivated by the desire to facilitate the mixing and processing of the materials and further to provide the coating with higher tear strength.

Response to Arguments

7. Applicant's arguments with respect to claims 1-14, 31-39 have been considered but are moot in view of the new ground(s) of rejection.
8. The art rejections in the office action mailed on 07/14/2003 have been overcome by the present amendment and response.

Conclusion

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on M,T,Th, F, 8:30-6:00 and on alternating Wednesdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV

DANIEL ZIRKER
PRIMARY EXAMINER
GROUP 1300-
1700

Daniel Zinker